

**DUKE POWER COMPANY**

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

July 14, 1983

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

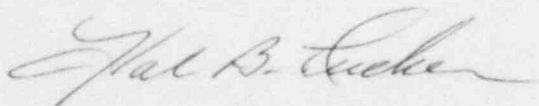
Attention: Ms. E. G. Adensam, Chief  
Licensing Branch No. 4

Re: Catawba Nuclear Station  
Docket Nos. 50-413 and 50-414

Dear Mr. Denton:

Section 8.4.10 of the Catawba Safety Evaluation Report provides a discussion of Confirmatory Item 38, 100% Load Rejection Capability. Attached is a revised response to FSAR question 430.110 which addresses this item.

Very truly yours,



Hal B. Tucker

ROS/php

Attachment

cc: Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

NRC Resident Inspector  
Catawba Nuclear Station

Mr. Robert Guild, Esq.  
Attorney-at-Law  
P. O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135½ Devine Street  
Columbia, South Carolina 29205

*3001  
1/1*

Mr. Harold R. Denton, Director  
July 14, 1983  
Page 2

cc: Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

Mr. Henry A. Presler, Chairman  
Charlotte-Mecklenburg Environmental Coalition  
945 Henley Place  
Charlotte, North Carolina 28208

CNS

430.110

Section 10.4.4.1 of the FSAR indicates Catawba can accept up to 100% turbogenerator load reduction without tripping the reactor or main steam relief valve actuation. Since this allows the turbine generator to remain on line powering station loads following a loss of the offsite power system, describe the magnitude and effect of the transient and steady state voltage and frequency output of the main generator on the station loads (especially on Class 1E loads) starting with and following load reduction.

Response:

If the turbine generator is subjected to a 100% load reduction, the maximum voltage on the output of the generator is estimated to be approximately 129% of rated with the period of the excursion where voltage is above 110% of rated being approximately 3.2 seconds. The maximum frequency is estimated to be approximately 107.5% of rated. Based on equipment ratings and test parameters, the brief transient resulting from a 100% load reduction on the turbine generator is not expected to have an adverse effect or impact on equipment/unit operation.